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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,490	10/08/2003	Pieter Vorenkamp	1875.3610001	5497

26111 7590 01/02/2009
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

DEPPE, BETSY LEE

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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01/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/680,490	Applicant(s) VORENKAMP ET AL.	
	Examiner Betsy L. Deppe	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,8-10,12 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-24 is/are rejected.
- 7) ☒ Claim(s) 1-4,8-10,12 and 18-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 24, 2008 with respect to claims 22-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. The claims are objected to because of the following informalities:
 - a. in claim 1, lines 4 and 11; claim 2, lines 2 and 3; claim 4, lines 2 and 3; claim 10, lines 1-2; claim 12, line 3; claim 22, lines 3-4; and claim 23, lines 2 and 3, "said transmission line" should be "said **differential** transmission line" (see claim 1, line 2 and claim 22, line 2, respectively);
 - b. in claim 1, line 13 and claim 12, line 3, the Examiner suggests changing "transmission lines of" to "transmission lines **forming**";
 - c. in claim 4, line 2 and claim 9, line 1, "said de-emphasis" should be "said **transmitter** de-emphasis" (see claim 1, line 4);
 - d. in claim 9, line 2, "said input signal" should be "**an** input signal";
 - e. in claim 22, line 6, the Examiner suggests changing "transmission lines of" to "transmission lines **forming**".Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salinger (US Patent No. 6,212,229 B1 cited in the Office Action mailed February 16, 2007) in view of Smith et al. (US Patent No. 5,608,707).

5. With regard to claims 22 and 23, Figure 3 of Salinger discloses the claimed invention including a differential transmission line (10) and a transmitter circuit with equalization (38) wherein the transmitter circuit with equalization (38) compensates for frequency distortion caused by the transmission line. (See abstract; column 1, line 64-column 2, line 18; column 6, lines 47-52) However, Salinger does not disclose that an equalizer coupled to the output of the differential transmission line wherein the equalizer includes an inductor between the first and second transmission lines that form the differential transmission line.

Figure 1 of Smith et al. discloses an equalizer (18) coupled to the output of a differential transmission line wherein the equalizer includes an inductor (see L1 in Figure 2) between the first and second transmission lines. (See column 2, lines 57-64 and column 3, line 65 - column 4, line 5) It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the equalizer in a receiver as disclosed by Smith et al. with a transmitter as disclosed system of Salinger in order to provide an improved differential transmission line communication system with reduced attenuation (see Salinger column 2, lines 14-23) and reduced jitter (see Smith et al. column 4, lines 11-17).

6. With regard to claim 24, Salinger in view of Smith et al. discloses the claimed invention including a transmitter circuit with equalization (38) that includes a de-

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emphasis circuit that increases with frequency across a band of interest. (See Salinger, Figure 2) Although Salinger refers to 38 as a “pre-emphasis filter” instead of “de-emphasis filter” as recited, the element as described in Salinger is functionally equivalent to the “de-emphasis filter” as recited and referring to 38 as a “pre-emphasis filter” or “de-emphasis filter” is merely a naming convention that does not affect the functionality/purpose of the element. Furthermore, based on Figure 6 of the present application, the terms “de-emphasis” and “pre-emphasis” appear to be interchangeable.

Allowable Subject Matter

7. Claims 1-4, 8-10, 12 and 18-21 are allowable.
8. The following is a statement of reasons for the indication of allowable subject matter: prior art of record does not teach or suggests in combination a data link system comprised of a transmitter de-emphasis circuit coupled to the input of a differential transmission line wherein the transmitter de-emphasis circuit includes first and second transconductance devices and a summer device, as recited in claim 1, lines 4-10.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Wednesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Betsy L. Deppe/
Primary Examiner, Art Unit 2611